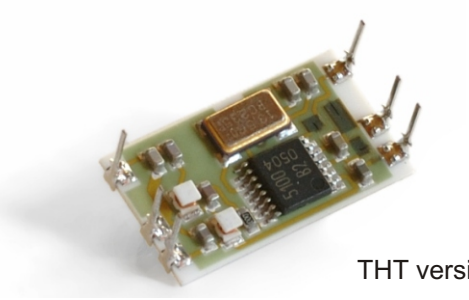
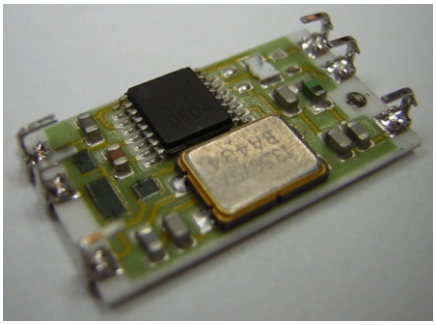
Radio Transmitter

RTFQ1-XXX

FSK Radio Transmitter with Crystal Oscillator and External Antenna



THT version



SMT version

General description

The RTFQ1-XXX is an hybrid circuit that allows to realize a complete radio transmitter adding a coding circuit.

It shows stable electric characteristics thanks to the "Thick film hybrid" technology.

XXX : working frequency (315, 433.92, 868.30, 868.35, 916, 920 Mhz)

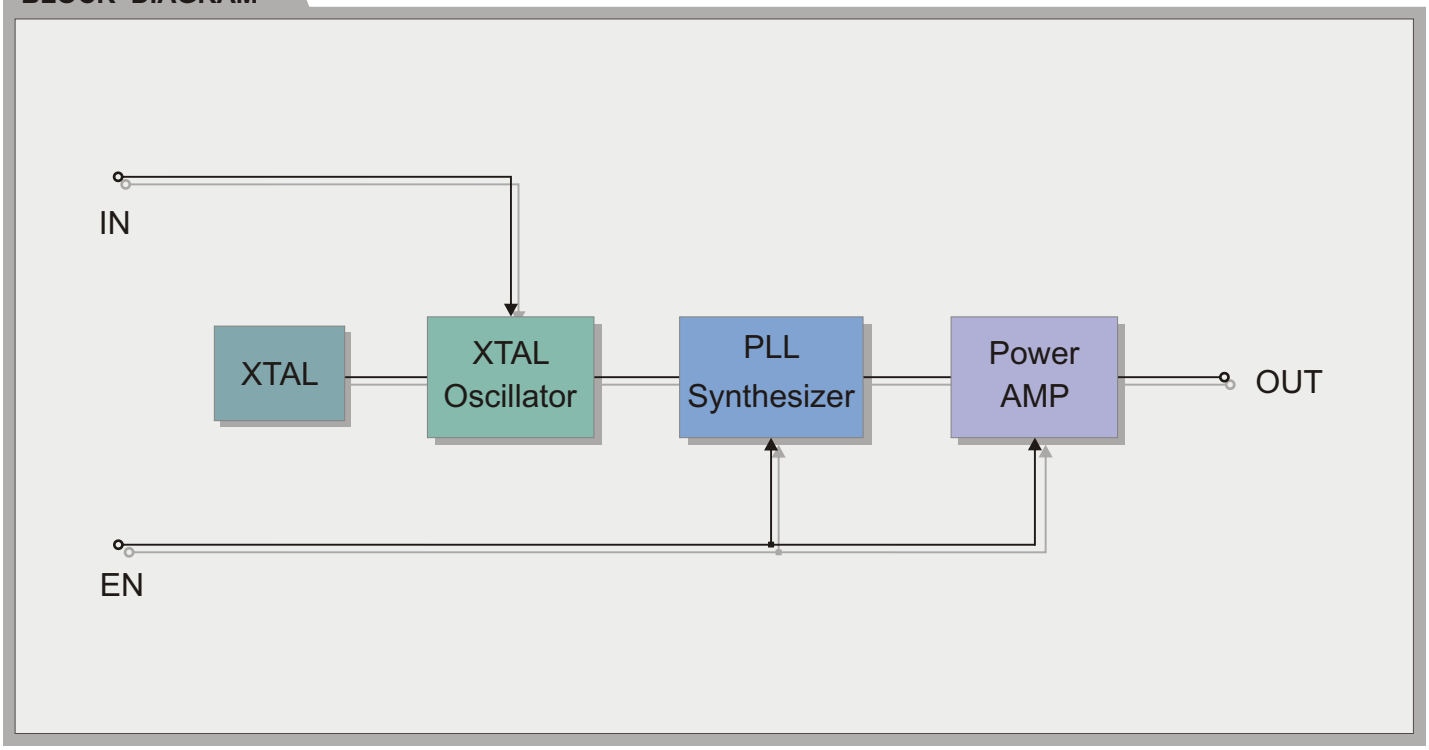
Features

- High Reliability
- DIL Package

Applications

- Wireless security systems
- Car Alarm systems
- Remote gate controls
- Sensor reporting

BLOCK DIAGRAM



Electrical Characteristics

Ta = 25°C unless otherwise specified

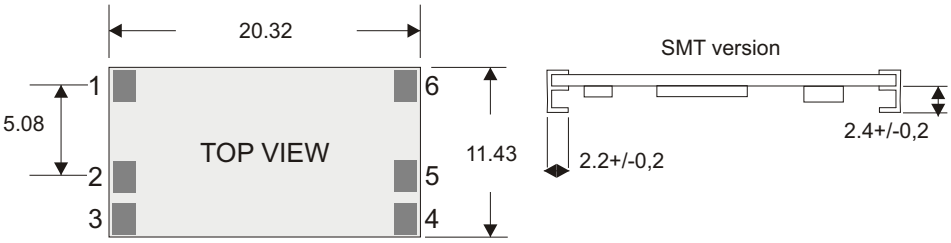
	CHARACTERISTICS	MIN	TYP	MAX	UNIT
V_{CC}	Supply Voltage	2.4	3.3	4	VDC
I_S	Operating Supply Current		7	8	mA
$I_{STANDBY}$	Standby Supply Current (IN = EN = Low)			100	nA
F_W	Working Frequency		315/433.9/868.35		MHz
P_O	RF Output Power into 50Ω (Vcc = 3.3V)		+5 / +5 / +1		dBm
	Initial Frequency Accuracy		+/- 35		KHz
	FM Deviation		+/-30		KHz
	Harmonic Spurious Emission		-50		dBc
V_{IH}	Input High Voltage	1.5		V_{CC}	V
	Max Data Rate			9.6	Kbit/s
	Power-Up Time (EN → full RF)			1	msec
T_{OP}	Operating Temperature Range	-25		+80	°C

EN	IN	STATE
L	L	Power Down Mode
H	H / L	Transmit Mode

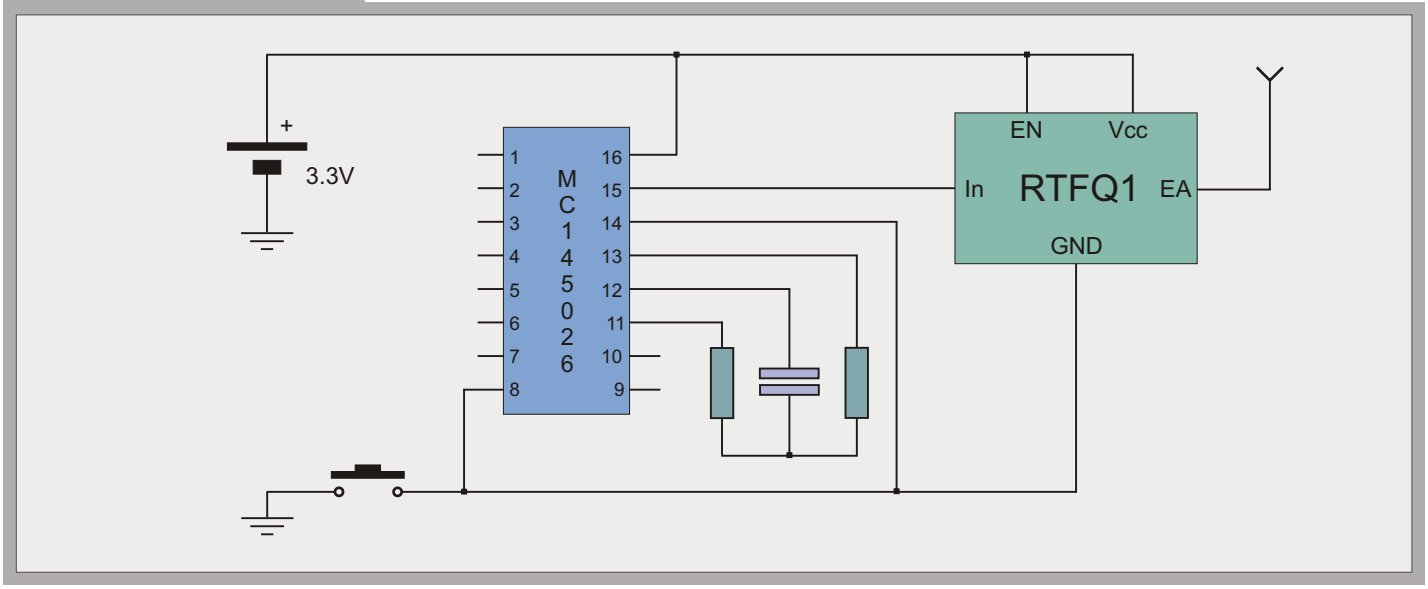
Pin Description

1 EN Enable
2 IN Data In
3 GND Ground
4 V_{CC} Supply Voltage
5 GND Ground
6 EA External Antenna

Mechanical Dimensions(mm)



TYPICAL APPLICATION



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